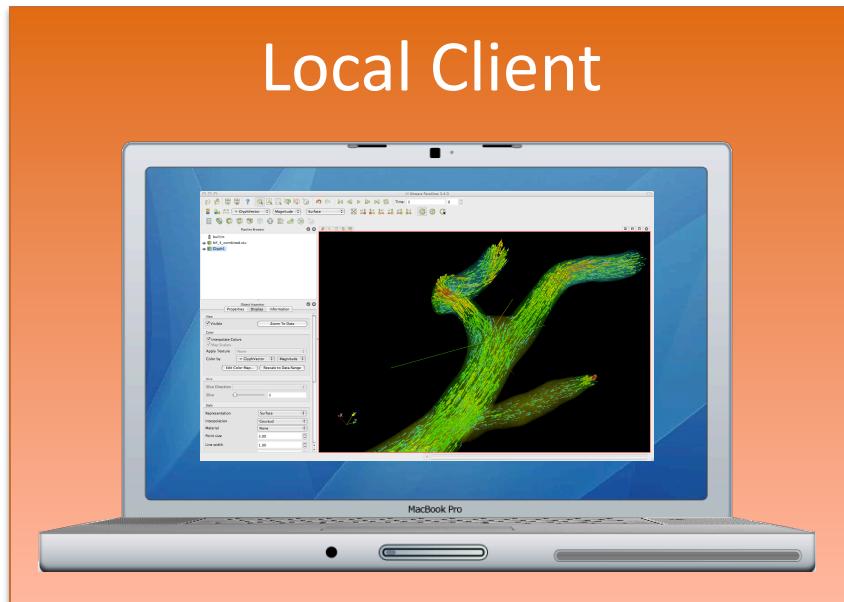


# Client/Server Visualization Components



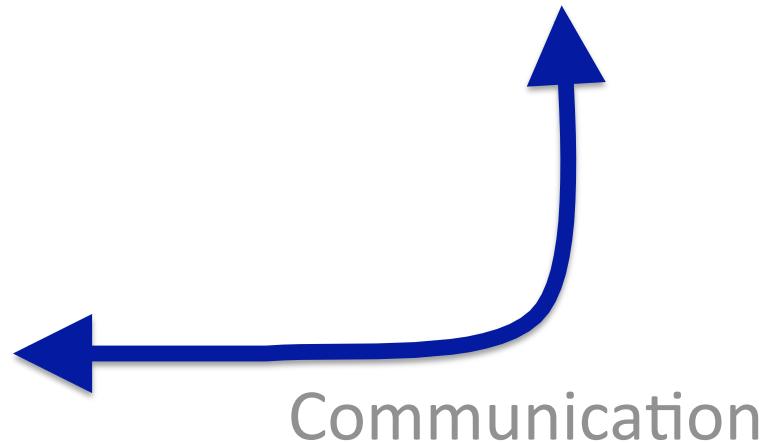
## Server Environment



Vis Node

Vis Node

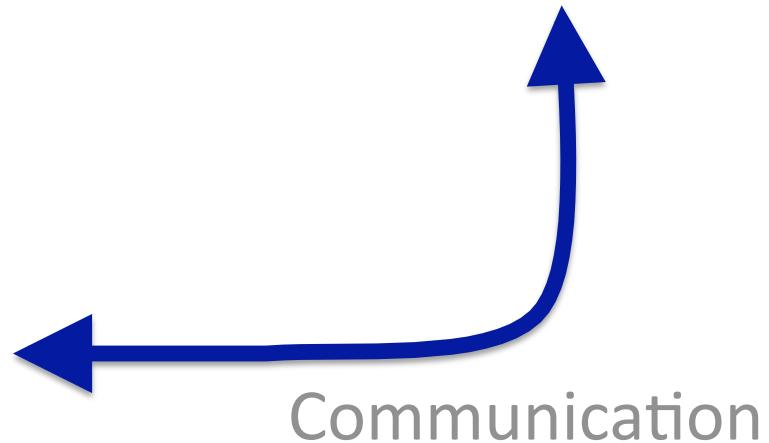
Vis Node



Communication

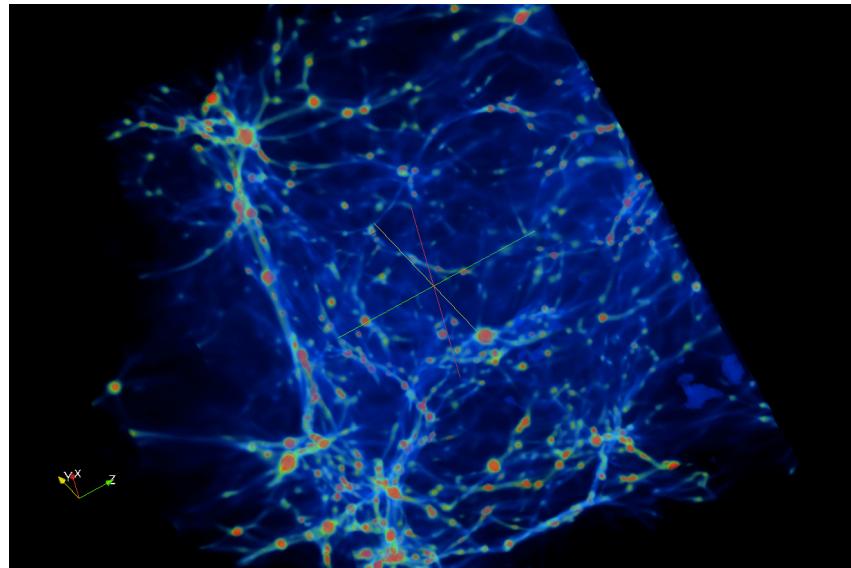


# Client/Server Visualization Components

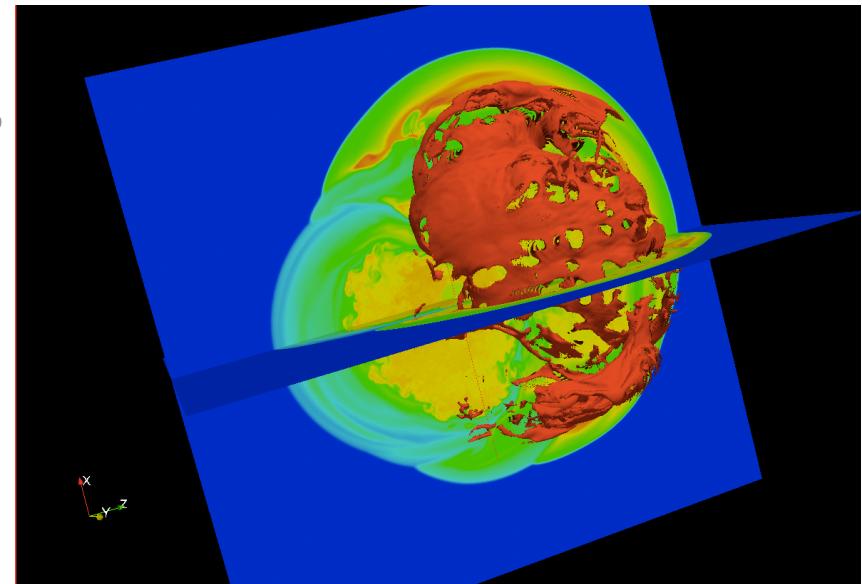


# Types of Visualization Enabled

- Cutting Planes
- Isosurfaces



- Volume Rendering



- Glyphs



# Let's Run ParaView on Eureka

- Install ParaView locally (see CD floating around)
- Documentation at:
  - [https://wiki.alcf.anl.gov/index.php/Paraview\\_on\\_the\\_Data\\_Analytics\\_Cluster](https://wiki.alcf.anl.gov/index.php/Paraview_on_the_Data_Analytics_Cluster)
- Set up environment on Eureka
  - `~/.softenvrc` file: `@paraview-3.4-mx`
  - Set `DISPLAY` in `.bashrc` or `.cshrc`
- Launch ParaView server on Eureka
  - `qsubi -n 4 -t 60`
  - Take note of hostname
  - `mpirun -np 4 -machinefile $COBALT_NODEFILE /soft/apps/paraview-3.4.0-mpich-mx/bin/pvserver`



# Let's Run ParaView on Eureka

- On Client, set up network path to Eureka
  - ssh -NL 11111:vs37:11111 **username@eureka.alcf.anl.gov**
- Connect local ParaView client to ParaView server
  - Configure server settings in ParaView Client
    - **Server Type:** *Client/Server*
    - **Host:** *localhost*
    - **Port:** *11111*
    - **Startup Type:** *Manual*
  - Connect



# Astrophysics Data Set

- /intrepid-fs0/users/insley/persistent/DATA/BLONDIN/  
E\_1295.raw
- Binary (Raw)
- Float
- Little Endian
- Extents: 0-431, 0-431, 0-431



# Astrophysics Data Set

- /intrepid-fs0/users/insley/persistent/DATA/  
HD1448.grid00000001.raw
- Binary (Raw)
- Float
- Little Endian
- Extents: 0-255, 0-255, 0-255

